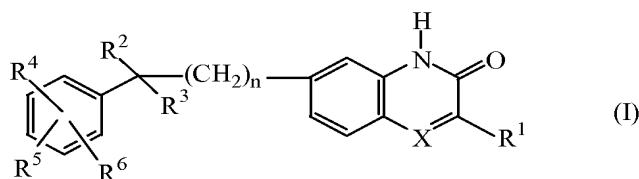


LISTING OF CLAIMS

1. (Original) A compound of formula (I),



the *N*-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl or thienyl;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

- (CH₂)_s- NR⁸R⁹ (a-1),
- O-H (a-2),
- O-R¹⁰ (a-3),
- S- R¹¹ (a-4), or
- C≡N (a-5),

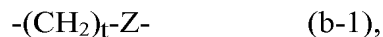
wherein

s is 0, 1, 2 or 3;

R⁸ is -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinylC₁₋₆alkyl, piperidinylC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy, thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidinyl, arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinylC₁₋₆alkyl, haloindozolylpiperidinylC₁₋₆alkyl, or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl;

R⁹ is hydrogen or C₁₋₆alkyl;

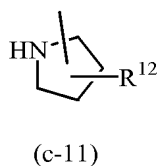
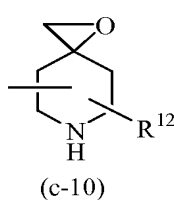
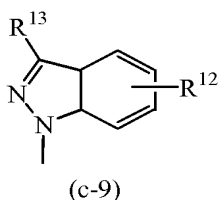
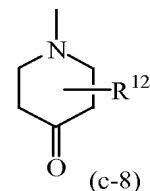
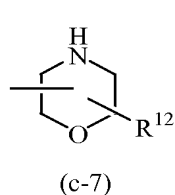
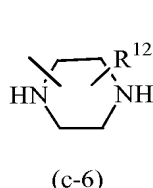
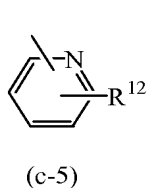
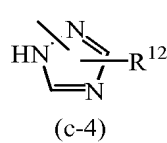
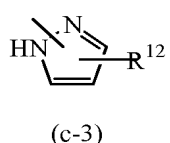
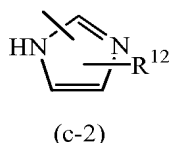
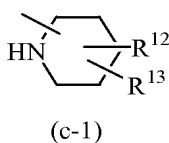
R^{10} is C_{1-6} alkyl, C_{1-6} alkylcarbonyl or $di(C_{1-6}alkyl)aminoC_{1-6}alkyl$; and
 R^{11} is $di(C_{1-6}alkyl)aminoC_{1-6}alkyl$;
or R^3 is a group of formula



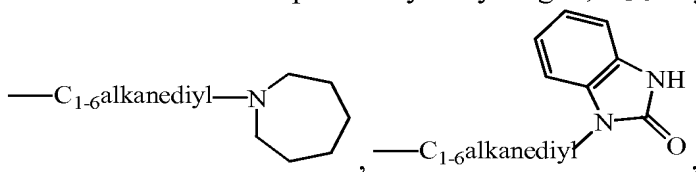
wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from



wherein each R^{12} independently is hydrogen, C_{1-6} alkyl, aminocarbonyl, hydroxy,



C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, $di(phenylC_{2-6}alkenyl)$,
piperidinyl C_{1-6} alkyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl,
aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl $C_{2-6}alkenyl$, morpholino,
 C_{1-6} alkylimidazolyl, or pyridinyl C_{1-6} alkylamino; and
each R^{13} independently is hydrogen, piperidinyl or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl,
trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, $di(C_{1-6}alkyl)amino$, $di(C_{1-6}alkyl)aminoC_{1-6}$
alkyloxy or C_{1-6} alkyloxycarbonyl; or

when R⁵ and R⁶ are on adjacent positions they may taken together form a bivalent radical of formula

- O-CH₂-O (d-1),
- O-(CH₂)₂-O- (d-2),
- CH=CH-CH=CH- (d-3), or
- NH-C(O)-NR¹⁴=CH- (d-4),

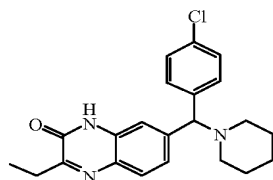
wherein R¹⁴ is C₁₋₆alkyl;

aryl is phenyl or phenyl substituted with halo, C₁₋₆alkyl or C₁₋₆alkyloxy;

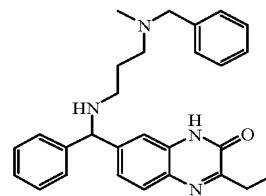
with the proviso that when

n is 0, X is N, R¹ is C₁₋₆alkyl, R² is hydrogen, R³ is a group of formula (b-1), t is 0, Z is the heterocyclic ring system (c-2) wherein said heterocyclic ring system Z is attached to the rest of the molecule with a nitrogen atom, and R¹² is hydrogen; then at least one of the substituents R⁴, R⁵ or R⁶ is other than hydrogen, halo, C₁₋₆alkyl or C₁₋₆alkyloxy.

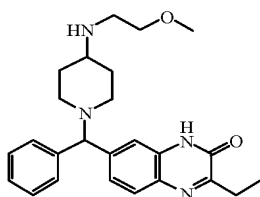
2. (Original) A compound as claimed in claim 1 wherein
n is 0 or 1; X is N or CR⁷, wherein R⁷ is hydrogen; R¹ is C₁₋₆alkyl; R² is hydrogen; R³ is a radical selected from (a-1) or (a-2) or is group of formula (b-1); s is 0, 1 or 2; R⁸ is C₁₋₆alkyl or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl; t is 0, 1 or 2; Z is a heterocyclic ring system selected from (c-1), (c-2), (c-3), (c-4), (c-5) or (c-11); each R¹² independently is hydrogen or C₁₋₆alkyloxyC₁₋₆alkylamino; each R¹³ independently is hydrogen; and R⁴, R⁵ and R⁶ are each independently selected from hydrogen, halo or C₁₋₆alkyl.
3. (Currently Amended) A compound according to claim 1 ~~and 2~~ wherein
n is 0 or 1; X is N; R¹ is C₁₋₆alkyl; R² is hydrogen; R³ is a radical of formula (a-1) or is a group of formula (b-1); s is 0; R⁸ is arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl; t is 0; Z is a heterocyclic ring system selected from (c-1) or (c-2); each R¹² independently is hydrogen or C₁₋₆alkyloxyC₁₋₆alkylamino; each R¹³ independently is hydrogen; and R⁴, R⁵ and R⁶ are each independently selected from hydrogen or halo.
4. (Currently Amended) A compound ~~according to claim 1, 2 and 3~~ selected from compound No 5, compound No 9, compound No 2 and compound No 1;



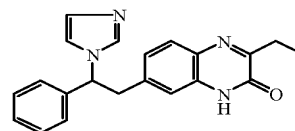
compound 5.



compound 9
.C₂H₂O₄ (1:2)

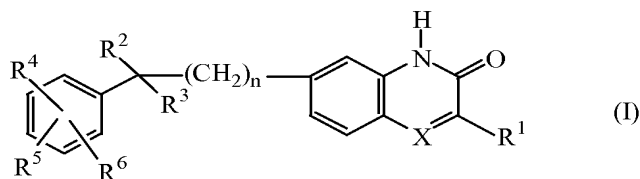


compound 2
.C₂H₂O₄ (2:5) ; and



compound 1

5. (Cancelled)
6. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound according to claim 1 ~~as claimed in claim 1 to 4.~~
7. (Cancelled)
8. (Currently Amended) A method of treating ~~Use of a compound for the manufacture of a medicament for the treatment~~ in a subject of a PARP mediated disorder, comprising administering to the subject a therapeutically effective amount of ~~wherein said compound is a compound of formula (I)~~



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl or thienyl;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

- (CH₂)_s- NR⁸R⁹ (a-1),
- O-H (a-2),
- O-R¹⁰ (a-3),
- S- R¹¹ (a-4), or
- C≡N (a-5),

wherein

s is 0, 1, 2 or 3;

R⁸ is -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinyC₁₋₆alkyl, piperidinyC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy, thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidiny, arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinyC₁₋₆alkyl, haloindozolylpiperidinyC₁₋₆alkyl, or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl;

R⁹ is hydrogen or C₁₋₆alkyl;

R¹⁰ is C₁₋₆alkyl, C₁₋₆alkylcarbonyl or di(C₁₋₆alkyl)aminoC₁₋₆alkyl; and

R¹¹ is di(C₁₋₆alkyl)aminoC₁₋₆alkyl;

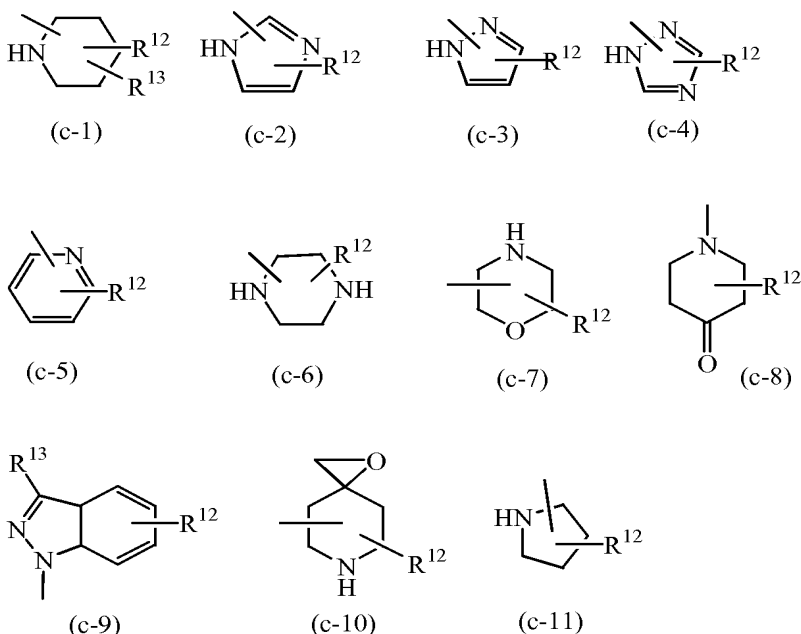
or R³ is a group of formula

- (CH₂)_t-Z- (b-1),

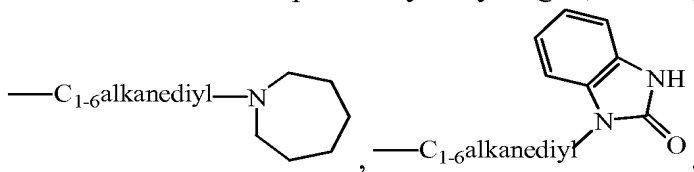
wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from



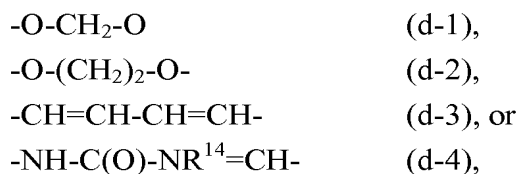
wherein each R^{12} independently is hydrogen, C_{1-6} alkyl, aminocarbonyl, hydroxy,



C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, di(phenyl C_{2-6} alkenyl),
piperidiny C_{1-6} alkyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl,
aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, morpholino,
 C_{1-6} alkylimidazolyl, or pyridiny C_{1-6} alkylamino; and
each R^{13} independently is hydrogen, piperidiny or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl,
trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, di(C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino C_{1-6}
alkyloxy or C_{1-6} alkyloxycarbonyl; or

when R^5 and R^6 are on adjacent positions they may taken together form a bivalent
radical of formula



wherein R^{14} is C_{1-6} alkyl;

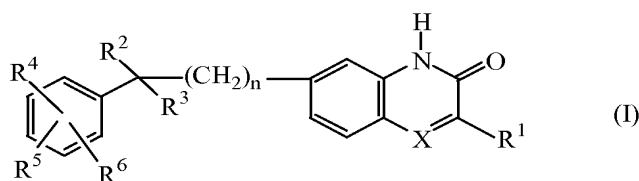
aryl is phenyl or phenyl substituted with halo, C₁₋₆alkyl or C₁₋₆alkyloxy.

9. (Cancelled)

10. (Currently Amended) A method for enhancing the effectiveness of chemotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy ~~Use according to claim 8 and 9 wherein the treatment involves chemosensitization.~~

11. (Currently Amended) A method for enhancing the effectiveness of radiotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy ~~Use according to claims 8 and 9 wherein the treatment involves radiosensitization.~~

12. (Original) A combination of a compound of formula (I) with a chemotherapeutic agent



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl or thienyl;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

- (CH₂)₈- NR⁸R⁹ (a-1),
- O-H (a-2),
- O-R¹⁰ (a-3),
- S- R¹¹ (a-4), or
- C≡N (a-5),

wherein

s is 0, 1, 2 or 3;

R⁸, R¹⁰ and R¹¹ are each independently selected from -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, amino, C₁₋₆alkylamino, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxycarbonyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinyC₁₋₆alkylaminocarbonyl, piperidinyC₁₋₆alkyl, piperidinyC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy, thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidinyC₁₋₆alkyl, arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinyC₁₋₆alkyl, haloindozolylpiperidinyC₁₋₆alkyl, or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl; and

R⁹ is hydrogen or C₁₋₆alkyl;

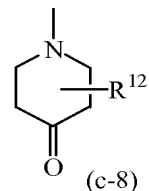
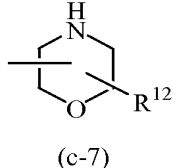
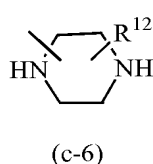
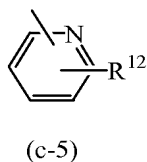
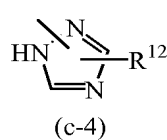
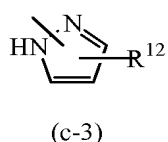
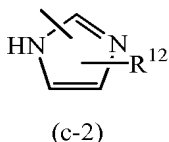
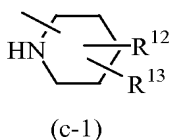
or R³ is a group of formula

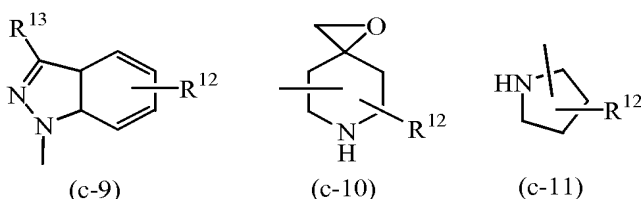


wherein

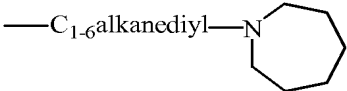
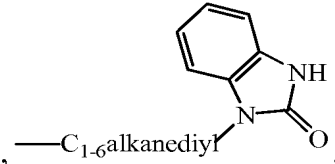
t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from



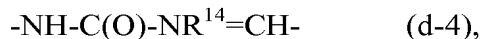
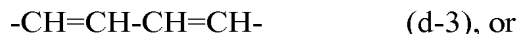


wherein each R^{12} independently is hydrogen, halo, C_{1-6} alkyl, aminocarbonyl, amino,

hydroxy, aryl, , , C_{1-6} alkylamino C_{1-6} alkyloxy, C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, aryl C_{1-6} alkyl, di(phenyl C_{2-6} alkenyl), piperidinyl, piperidinyl C_{1-6} alkyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl, aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, aryl C_{1-6} alkylamino, morpholino, C_{1-6} alkylimidazolyl, or pyridinyl C_{1-6} alkylamino; each R^{13} independently is hydrogen, piperidinyl or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, amino, amino C_{1-6} alkyl, di(C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino C_{1-6} alkyloxy or C_{1-6} alkyloxycarbonyl, or C_{1-6} alkyl substituted with 1, 2 or 3 substituents independently selected from hydroxy, C_{1-6} alkyloxy, or amino C_{1-6} alkyloxy; or

when R^5 and R^6 are on adjacent positions they may taken together form a bivalent radical of formula

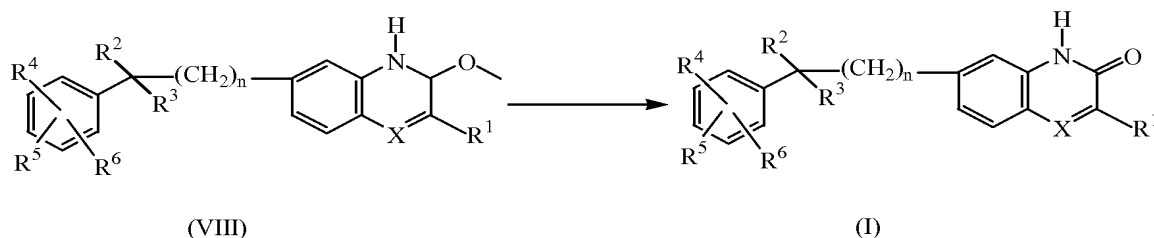


wherein R^{14} is C_{1-6} alkyl;

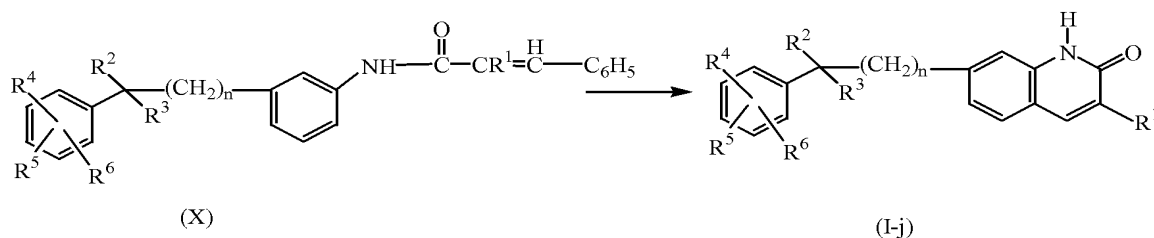
aryl is phenyl or phenyl substituted with halo, C_{1-6} alkyl or C_{1-6} alkyloxy.

13. (Currently Amended) A process for ~~preparing~~ preparation of a compound as claimed in claim 1, comprising ~~characterized by~~

- a) ~~the hydrolysis of intermediates of formula (VIII), according to art known methods, by submitting the intermediates of formula (VIII) to appropriate reagents, such as, tin chloride, acetic acid and hydrochloric acid, in the presence of a reaction inert solvent, e.g. tetrahydrofuran.~~



- b) ~~the cyclization of intermediates of formula (X), according to art known cyclizing procedures into compounds of formula (I) wherein X is CH, herein referred to as compounds of formula (I-j), and, preferably in the presence of a suitable Lewis Acid, e.g. aluminum chloride either neat or in a suitable solvent such as, for example, an aromatic hydrocarbon, e.g. benzene, chlorobenzene, methylbenzene and the like; halogenated hydrocarbons, e.g. trichloromethane, tetrachloromethane and the like; an ether, e.g. tetrahydrofuran, 1,4 dioxane and the like or mixtures of such solvents.~~



- c) ~~the condensation of an appropriate ortho-benzenediamine of formula (XI) with an ester of formula (XII) wherein R^h is C₁₋₆alkyl, into compounds of formula (I), wherein X is N, herein referred to as compounds of formula (I-i), in the presence of a carboxylic acid, e.g. acetic acid and the like, a mineral acid such as, for example hydrochloric acid, sulfuric acid, or a sulfonic acid such as, for example, methane-sulfonic acid, benzenesulfonic acid, 4-methylbenzenesulfonic acid and the like.~~

